AMERICAN MINING CONGRESS

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MONTHLY BULLETIN

OCTOBER, 1910

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A SUCCESSFUL MEETING

Delegates returning from the Annual Session at Los Angeles report that gathering as the most important and profitable ever held by the Mining Congress, and the attendance most representative. The widespread interest shown, the valuable discussions brought out, and the vigorous yet sane manner in which vital questions were attacked, indicate an intensified concern about the questions, political and otherwise, which envelope the mining industry.

Conservation, implying a great variety of features, such as disposition of the remaining mineral lands, water power sites, timber reserves, rights of prospectors and miners, state's rights, the leasing system, use of timber in mining, classification of mineral lands, etc., was one of the main questions, and was handled by many prominent minds. This broad doctrine now has many points of contact with the mining industry, and is becoming so important that mining men generally are recognizing the necessity of working to protect their mutual interests.

The resolutions of the Annual Session, in the main, give shape to the policy of the American Mining Congress, and those adopted at Los Angeles, together with the unfulfilled resolutions of previous sessions, indicate the lines along which this organization will work during the coming year. Elsewhere in this issue we give in full the resolutions adopted concerning Conservation; the others will be printed and placed in the hands of our members at an early date, together with the remainder of the proceedings of the session verbatim.

In this issue we also print the Annual Address of President Buckley.

In achievement, the year just closed is the best in the history of this organization. Let us hope that the ensuing year will be fully as profitable, which it certainly will be if the co-operation of mining men generally be extended to this organization. In Doctor Buckley's address is enumerated some of the things which the Mining Congress is striving to accomplish; in the endeavor to bring about these much needed reforms we ask your continued assistance.

MEETING OF BOARD OF DIRECTORS

A meeting of the Board of Directors was held at the Alexandria Hotel, Los Angeles, Cal., on Friday afternoon, Sept. 30, 1910.

The Secretary announced that the following Directors had been chosen at the Annual Meeting of Members on Sept. 29, 1910:

For a period of one year, to succeed B. F. Bush, John Dern of Salt Lake City, Utah.

For a period of two years, to succeed E. A. Montgomery, E. R. Buckley of Rolla, Missouri.

For a period of three years each, to succeed E. R. Buckley, Geo. W. E. Dorsey and John Dern, the following were chosen:

Col. L. W. Powell, Warren, Ariz.
Charles A. Barlow, Bakersfield, Calif.
E. A. Montgomery, Los Angeles, Calif.

There were present at the meeting Messrs. E. R. Buckley, John Dern, L. W. Powell, E. A. Montgomery, David W. Brunton, and Col. Geo. W. E. Dorsey.

The new Board of Directors perfected its organization by the election of the following officers:

President, John Dern.
First Vice President, Samuel A. Taylor.
Second Vice President, D. W. Brunton.
Third Vice President, E. A. Montgomery.
Secretary, Jas. F. Callbreath, Jr.
Executive Committee, Messrs. John Dern, D. W. Brunton and A. G. Brownlee.

After the consideration of routine matters, the Directors discussed several plans touching future work of the Mining Congress, all of which will be laid before the members in due time, through the columns of the Monthly Bulletin.

ADDRESSES WANTED

Mail directed to the following members has been returned unclaimed and we would be glad to receive information as to their present respective addresses. Other members will confer a favor by notifying us, in case the information is at hand.

We wish to acknowledge the courtesy of several members who have kindly given us information concerning members whose latest addresses we did not have.

NAME.	LAST ADDRESS GIVEN.
Alsdorf, F. C.	Sodaville, Nev.
Anderson, Carl	411 Hellman Bldg., Los Angeles, Cal.
Beck, W. A.	223 Mohawk Blk., Spokane, Wash.
Beery, H. F.	815 Amer. Bank Bldg., Seattle, Wash.
Belen Mining Co.	Douglas, Ariz.
Blockberger, F. R.	Portland, Ore.
Bedell, S. A.	Fenner, Cal.
Boyrie, H. E.	428 N. Y. Blk., Seattle, Wash.
Cardwell, B. A.	354 Arcade Annex, Seattle, Wash.
Davis, Jack	Goldfield, Nev.
Earnest, F. G.	607 Jameson Blk., Spokane, Wash.
Eastman, A. F.	P. O. Box 887, Spokane, Wash.
Eisen, A. C.	Goldfield, Nev.
Fox, James H.	Empire Bldg., Seattle, Wash.
Fredericks, L. G.	Buffalo, Ark.
Horse Shoe Mining Co.	231 Epler Blk., Seattle, Wash.
Hull, C. W.	Bisbee, Ariz.
Hull, Harry D.	Central City, Colo.
Hussey, J. V.	Goldfield, Nev.
Ish, Marvin E.	Box 58, Goldfield, Nev.
Kennedy, Jno. F.	12-13 P. I. Bldg., Seattle, Wash.
Kennedy, S. D.	Reno, Nev.
Knowles, W. H.	55 Temple Blk., Los Angeles, Cal.
Lane, Chas. D.	Browns Valley, Calif.
Mann, Fred A.	Joplin, Mo.
Marshall, W. C.	232 D. F. Walker Bldg., Salt Lake, Utah.
McDonald, J. R.	Rhyolite, Nev.
McMullan, John	Sacramento, Calif.
Miller, W. A.	17 Bank Blk., Denver, Colo.
Muir, Downie D.	Alice, Colo.
Mullen, R. G.	Orogrande, N. M.
Newsander, Sam	607 Jamison Blk., Spokane, Wash.
Phillips, S. B.	Sandpoint, Idaho.
Remington, W. H.	228 Epler Blk., Seattle, Wash.
Roberts, Wm.	Shultz, via Tucson, Ariz.
Samuel, R. L.	Cananea, Sonora, Mex.
Schrock, J. B.	611 Fernwell Bldg., Spokane, Wash.
Sierra Madre Mining Co.	628 Scarritt Bldg., Kansas City, Mo.
Thomas, Timothy.	Baxter Springs, Kans.
Tracy, T. H.	Hotel Alexandria, Los Angeles, Cal.
Van Waters, Geo. S.	71 No. Third St., Portland, Ore.
Walters, Wm. J.	1132 27th Ave., Seattle, Wash.
Ward, E. R.	262 Touraine Hotel, Spokane, Wash.

MEETINGS

Colorado Chapter

A meeting of the Colorado Chapter of the American Mining Congress (which includes all members of the Mining Congress residing in Colorado) will be held at 1510 Court Place, Denver, on Friday evening, Oct. 21, at 8 o'clock.

There will be a discussion on the question of Mine Taxation in Colorado, and a progress report from the committee which has been investigating this matter.

All mining men are invited to attend this meeting and contribute discussions.

Oregon Mining Men

A state meeting of Oregon mining men will be held at Sumpter, Oregon, on October 20th and 21st. The meeting will consider questions affecting the mining industries of that state.

Montana Chapter

A meeting of Montana mining men will be held at Butte, Mont., on Friday evening, Oct. 21, 1910, for the purpose of effecting the organization of a Montana chapter of the American Mining Congress. Secretary Jas. F. Callbreath, H. S. Taylor, James A. Walsh, and other members of the Mining Congress will speak.

CONSERVATION RESOLUTIONS

Adopted at the Los Angeles Session.

Conservation was one of the most important questions considered at Los Angeles, and many angles of thought were brought out concerning the application of this doctrine to the West. A number of resolutions on this subject were introduced, and for convenience all were referred to a special sub-committee on Conservation, the report of which was adopted by the Committee on Resolutions and, later, by the Convention.

The resolutions touching Conservation, which were adopted, are as follows:

As a substitute for Resolution No. 10:

Resolved, That in common with citizens of the United States engaged in other industries, we approve the theory and practice of true conservation, which means utilizing and developing with the least possible waste the natural resources of our country.

We recognize, as men engaged in one of the most important industries of our country, the value of true conservation and its intimate relation to the mining interests, and recommend the enactment of such legislation, both state and national, as will bring about a beneficial development of the mines, the public lands, the public water rights and the timber contained within our great western country for the best interests of the present and future generations without unnecessary waste.

We condemn, however, as unwise, as opposed to the best interests of the American people, and as wholly unnecessary to the success of any plan of true conservation, legislation or proposed legislation which tends to make the miners and other citizens of the public land states who invest their time, labor and capital in the development of the natural resources contained within such states, lessees of or tribute-payers to the national government.

We believe that every legitimate means should be adopted in the control of public lands to eradicate or lessen the evils of monopoly, but fail to find in any of the remedies suggested by the advocates of the leasing system how this can be accomplished by changing the present laws so as to take from the citizen a clear title and substitute therefor a lease.

As a substitute for Resolution No. 12:

Whereas, The laws relating to Forest Reserves provide that nothing therein contained shall prohibit any person from entering upon such forest reservations for all proper and lawful purposes, including that of prospecting, locating and developing the mineral resources thereof; and,

Whereas, Reports have been made from time to time to this Congress that in the administration of the rules and regulations of the Forest Service, in many instances, mining and prospecting have been discouraged within the Forest Reserves, and miners and prospectors have been hampered and interfered with in the exercise of their lawful vocation; and,

Whereas, Assurances have been made to this Congress by representatives of the Forest Service that in their administration of the laws relating to the public lands under their jurisdiction they will in no manner discriminate against or interfere with the legal rights of prospectors and miners, but will aid and assist them in the development of the mineral resources within the Forest Reserves; therefore,

Resolved, That in reaffirming the right of every prospector who is a citizen of the United States, or who has declared his intention of becoming such, to enter upon and prospect every part of the public domain, we suggest and recommend a spirit of greater harmony and co-operation between the prospector and miner upon one side and the officials of the government on the other.

We further recommend that the laws relating to the public domain, and particularly that part of the public domain lying within the forest reservations, be administered without burdensome and discouraging departmental rules and regulations, and in such a manner as to foster and encourage the mining industry.

We condemn the actions of any class of citizens who go upon the Forest Reserves, or other public lands, for the purpose of locating fictitious mining claims in order to obtain the timber contained thereon, but we ask Congress to protect the miner and prospector in the development of the mineral resources by the enactment and enforcement of such laws as will give them the right to use such timber and other products of the soil from the public domain as may be necessary in the proper development of their mines.

As a substitute for Resolution No. 30:

Resolved, That, recognizing that the right to appropriate to a beneficial use waters upon the public lands is fully recognized by Congress and the courts to be wholly governed by the laws of the state wherein such waters are located; and,

That the development of mines and the mining industry in many sections of our country is largely dependent upon the use of water power, and that there are large amounts of undeveloped water power now running to waste on the public domain which in the interest of true conservation should be utilized and put to a beneficial use; and,

Recognizing, further, that the national government is the owner of large quantities of lands bordering upon and adjacent to streams, the waters of which belong to and are under the control of the states, and that by reason of such diversity of ownership and the different constructions placed upon existing laws relating thereto water power development in the West has practically ceased; and,

Recognizing, further, the great expense necessarily incurred in the construction of water power plants in the mining region, which involves in most cases an expenditure of several million dollars, the uncertain markets for power presented by the mining districts, and the great bene-

fits derived by the mining industry by the construction of such plants;

We, therefore, recommend that laws be speedily enacted which shall definitely and accurately define the rights of citizens to utilize and put to a beneficial use the waters of the streams and the rights of way on public lands adjacent thereto for water power purposes, and that such laws provide for the concurrent use of the rights of way so long as the water rights are put to a beneficial use under the laws of the state, or for a sufficient length of time to enable those who engage in their development to secure a reasonable return upon their investment.

We believe, and therefore recommend, that for the purpose of harmonizing all interests and bringing about a proper development of water power, freed from monopolistic influences, all water power sites upon the public domain should be under the control and supervision of the respective states wherein said rights are located.

As a substitute for Resolution No. 32:

Resolved, That this Congress believes that the best interests of all the people will be conserved by state regulation and control of all natural resources within the boundaries of each and every state in the very largest measure compatible with present federal statutes.

As a substitute for Resolution No. 33:

Resolved, That any conservation policy which places obstacles or restrictions in the way of the free and unrestricted prospecting and location of metalliferous mineral lands, or which favors any lease or royalty upon the future tenure and production of such locations, is inimical to the development of our country's resources, represents a step backward and strikes directly at the welfare and prosperity of the entire mining industry.

Resolved, Further, That we endorse the work of the Forest Service in its efforts to preserve and maintain a rational consumption of the nation's timber resources; but we are unqualifiedly opposed to any and all withdrawals of metalliferous mineral lands from public entry and to any legislation which will in any way interfere with the free prospecting, location of or production from mining claims.

ANNUAL ADDRESS OF PRESIDENT BUCKLEY.

It is extremely gratifying at this time to be able to report a most successful year in the history of this organization. Our financial condition has improved and our membership has increased. Our legislative campaign has been a success and the committees have been especially active in conducting the investigations committed to their charge. We rejoice, today, in the consciousness of having accomplished something definite for the mining industry, and the hope of doing greater things in the future. The American Mining Congress has been accorded scant recognition in some sections of the country during the years passed, partly on account of its aggressive policies, partly on account of manifest indifference, and partly on account of the men who represented these policies. Today the attitude of indifference is passing, and we include among our members many of the foremost mine operators and mining engineers of the country, all of whom are sharing in the work which this organization is carrying on.

On the first of May, 1910, the total membership was 1,059. This organization should have a membership of 10,000, and one of the most important activities for the coming year should be a campaign for members, carried on continuously and persistently.

The work of this Congress is not represented by its publications, as is the American Institute of Mining Engineers, although there is much that is valuable in the annual proceedings and the monthly bulletins. Its primary object is not the publication of the results of scientific investigations. It is an association of men interested in mining, maintained for the purpose of encouraging mining in all its various phases and to promote a spirit of co-operation between the mining industry and agriculture, manufacturing and transportation, to the end that the development of these industries may be mutually helpful and that each may receive from the other and from the Federal and State governments its just proportion of encouragement through co-operation. Its work is more nearly allied to that of the Chambers of Commerce and Mines in our large cities, than it is to the scientific associations of the country. The fact that the members have not received pretentious volumes dealing with the mining industry may have led some to believe that

they were not receiving adequate returns for the money invested in membership fees and annual dues. On the other hand, those who have been most intimately associated with the growth of the organization have felt that its objects were not only worthy of their money, but also of their time and talents. We believe that most mining men in this country, could they once be made to understand the unselfish spirit prompting the men who are carrying on the work of this organization, would contribute, not only their money, but what is vastly more important, their influence, to aid in the accomplishment of those things for which this body is organized.

Finances.

This Congress has no systematic means of securing funds, except through the fees and annual dues of members. These alone will about sustain the permanent headquarters, paying the salary of the Secretary and his clerical force. The fund obtained in this way has never been adequate to carry on legislative campaigns and pay the expenses contingent upon the annual meeting. The campaign for the Bureau of Mines, last winter, required the maintenance of an office in Washington for six months, and the almost exclusive time of the Secretary and a clerk. This campaign was made possible only through the efforts of the Sierra Madre Club of Los Angeles, which secured voluntary contributions from mining men of the Southwest sufficient to meet these expenses. During the coming year I do not apprehend that there will be any necessity of maintaining headquarters in Washington. It ought to be possible for the organization to carry on such legislative work as may be necessary from the permanent headquarters. This will afford the Secretary an opportunity to devote his time and attention chiefly to the work of strengthening the membership and securing voluntary contributions to provide for any liabilities which may be incurred in excess of the receipts from annual dues and membership fees.

Permanent Endowment.

Many of the great fortunes in this country have been made chiefly as a result of the development of the mineral resources of this country. Yet of all of the organizations of this country, those representing mining are the most scantily endowed. The American Mining Congress should have a permanent, invested fund of $500,000, the income from which might be used for carrying on its legitimate work. I know of no greater service one could render the mining industry than the creation of such an endowment.

Where could one, who has made his millions out of the mines of this country, find a more fitting monument? Are there not five men in this Southwestern country alone, who together could provide this endowment?

Branch Organizations.

Several years ago the Mining Congress provided for the establishment of branches in the mining centers of the country. Several branches have already been organized and others are in prospect. There appears to be no reason why many of the local mining organizations should not affiliate with the Mining Congress, thereby serving the industry at large and securing for themselves the close and intimate co-operation of the national organization. Undoubtedly there are many questions of a local character which cannot be dealt with through the national organization, but that organization might render important service to the local branches in solving these very problems. The organization of local branches cannot be easily effected without having a representative of the national organization on the ground. For this reason it is thought that in conjunction with the work for members during the coming year the Secretary might devote a portion of his time profitably to the organization of branches.

Permanent Headquarters.

At the Portland convention, after a most strenuous contest, permanent headquarters were established in Denver. This action was taken with the understanding that the State of Colorado and the city of Denver should provide amply for the housing and care of such headquarters as might be required to carry on the work of the organization. The permanent headquarters of this association are a credit to any city, to any state, and I believe that any city or state that has been neglectful of its obligation should be reminded of the fact that there are other states and other cities which will not only be willing but glad to assume any measure of responsibility necessary to maintain this organization in their midst. The people in whose midst the permanent headquarters are now located should be called upon to give renewed assurances that the obligations which they imposed upon themselves at the Portland convention will be adequately and fully met in the future.

The Federal Bureau of Mines.

After thirteen years of agitation for recognition by the Federal government, ten years of which was spent in a hopeless struggle for

a Department of Mines with its head a member of the President's cabinet, there has been created a Bureau of Mines, for the maintenance of which $502,200 has been appropriated. I can only believe that it was through some misunderstanding on the part of our representatives in Congress that the appropriation for the investigation of our structural materials was made to the Bureau of Standards rather than to the Bureau of Mines. These investigations clearly belong to the Bureau of Mines and there should be little difficulty in having Congress direct any subsequent appropriations into the proper channels. The Bureau of Mines has been created on broad principles which will admit of carrying on any technological investigations which may be construed as being pertinent to the mining industry. In importance it stands equal to the long-established Geological Survey, which has rendered much important service to the mining industry in the field of exploration. The appropriations made by Congress for the inauguration of the work of the Bureau of Mines have been dedicated chiefly to such investigations as have been demanded by the coal mining interests. Mining men, as well as the public, are unanimous in their approval of these specific appropriations which have been made chiefly in the interest of humanity. This meeting should express its grateful appreciation to the Senators and Representatives who were especially active in securing the passage of the Bureau of Mines bill. We should also convey to the President, William H. Taft, our thanks for the recognition accorded this body in the appointment of the first Director of that Bureau.

We are still far removed from a Department of Mines with Cabinet representation, although, in the natural course of events, the necessity of its creation will be recognized. Let us lay this ambition aside for the present and give our undivided attention to securing for the Bureau of Mines that financial support to which it is entitled. This Bureau must grow, as all other institutions have grown, but it is our duty to see that it is properly nourished, and herein, for the present, we can perform a most useful service.

The mining industry is now represented by two Federal bureaus of equal importance; one of which is concerned with those activities which are exploratory in nature and the other of which is concerned with such activities as may be termed operative, or technological. Because this association has been active in the creation of the Bureau of Mines is no reason that it should forget its obligations to or withhold its support from the Geological Survey. Neither should we in any way permit the personnel of the Bureaus to influence our activities in behalf of either. It is not easy to

believe that in opposing the appointment of the Director of the Bureau of Mines, that the Director of the Geological Survey was actuated by any selfish motive. I confidently believe that he was only fearful lest there might not be that close co-operation between the two Bureaus which appears to be so essential to the success of both. This body may be of great service to the mining industry in demanding a spirit of friendly co-operation, which is necessary to the highest accomplishments of both. There must be no spirit of rivalry, and should any feeling of jealousy arise between the men in charge of these Bureaus, we must forget the men and remember only the institutions which they represent.

From diligent inquiry, I find that there are many fundamental problems connected with the treatment of ores in the Western mining camps awaiting such investigations as appear pertinent to the Bureau of Mines. In my own state, for example, I am confident that of all the zinc in the ground mined over, not to exceed thirty per cent has ever reached the consumer in the shape of the finished products. Such a condition should be a matter of concern to everyone, and there should be no one so short-sighted as to oppose any investigation, federal, state or private, which has for its purpose an increase in the percentage of recovery of this or any other metal.

I commend to you for your consideration the desirability of urging upon Congress the making of appropriations to the Bureau of Mines for carrying on investigations in the various metal mining districts, where losses of this nature are evident.

Experimental Stations.

I have yet to hear any well-founded argument against the establishment of experimental stations by the Federal government to assist in solving the more difficult problems of ore concentration. Neither do I know of any good reason why the Federal government should not appropriate money to assist in the maintenance of those experimental plants already established in connection with the various state Schools of Mines. This body has at different sessions considered this question and it is again presented to you for your consideration.

Revision of the Mineral Land Laws.

In connection with a revision of our mineral land laws there appears to be much difference of opinion as to what is most desirable. It is evident that there is at present too much litigation in perfecting and retaining titles to mineral lands and this appears to be attributable to the nature of our Federal and State laws. There

also appears to be dissatisfaction in the classification of the lands of the public domain, especially as pertains to the rulings of the Forestry service. Further, it is well known to those who are acquainted with conditions in some of the larger mining camps, that much promising land is tied up through ownership by extinct corporations, through ownership under more or less questionable tax titles, through ownership by a widely scattered number of co-tenants, and in estates which have not been administered upon. In the case of Leadville, Colorado, for example, a camp of about forty square miles, it is believed that the ores are widely distributed from the overlying white porphyry to the granite beneath. There are perhaps 5,000 mining claims in this camp and yet a very small portion of these are being developed or even explored. They are owned in every supposable variety of manner, and in a great many cases it would probably be impossible to find all of the owners and when found it would not be uncommon to find that they would be unwilling to co-operate with each other in any plan to mine or prospect the property. In a great many cases the owners pursue their legal rights to await development of value, believing it to be to their ultimate interest to do so. The result of this condition is that more than one-half of the desirable mining property in this district is in a sort of a dead-lock condition, such that no one can develop the same. It is not my purpose to offer any solution of this problem, but would respectfully call your attention to the report of the committee on the Revision of our Mineral Land Laws, in which they recommend that this body urge upon Congress a general revision of the mineral land laws. It is apparent to the committee that it will be practically impossible to correct one fault without straightening out the entire code. It is evident that this organization should seriously consider the recommendation of a general revision, abandoning the idea of a patchwork.

Free Assaying.

There is also the question of establishing assay laboratories under the Bureau of Mines for the making of free assays in the case of undeveloped properties. This as well as the proposition for the establishment of experimental stations has been objected to by mining engineers and professional assayers on the ground that it would be an infringment upon the work of a well established profession. However this may be, it must be conceded that some remedy is needed for a condition whereby thousands of dollars are squandered annually, as a result of the encouragement given prospectors by

private laboratories reporting fictitious values in samples submitted for assay. I believe that this body should urge one of two things to protect the prospector from the deception of unreliable assayers; either the establishment of free assay laboratories by the Federal government or the licensing of assay laboratories and their maintenance under a system of State inspection.

The Pseudo-Professional Expert.

The mining industry has suffered for years from the pseudo-professional man who lends himself to the support of fake mining propositions, furnishing the most alluring reports at so much per thousand words. Scattered over the length and breadth of this land are men of no training and less knowledge of mining who sell themselves to the unscrupulous dealer in mining propositions. The public at large has little acquaintance with the professional standing of the various individuals who make reports upon mining properties, the name of one man looking as good as that of another provided he has appended thereto the letters M. E. Most people are unable to read understandingly the report of an engineer. This being the condition of the public, it is often lead to invest in worthless properties through the silver-lined reports of these pseudo-professional men. There should be some way of publicly branding these fakers, for they are often more dangerous than the promoter whose mine is merely a castle in the air. How best to bring about a change in this condition is a matter worthy of your consideration.

Fake Promotion.

As a result of the activities of this organization several of the states have enacted laws to punish the man who handles mining stocks with the purpose of defrauding the public. There is a wide difference between investing in mines and investing in mining companies. It has been conservatively estimated that it costs 50 per cent of the selling receipts to meet the expense of such sales; and while it might be possible to estimate the amount of money going into mining propositions it is not easy to determine how much is going into actual mining. Over-capitalization of many otherwise meritorious mining propositions has long been practiced, and I believe that another method of restoring confidence in the mining business would be to urge upon the several states the enactment of laws which would prevent this imposition from being practiced upon the investing public. I would respectfully call your attention to the advisability of recommending the enactment of laws taxing mining

ventures on their stock issued, as suggested by Mr. Everett at the fourth annual session.

We should devote some of our time to a proper treatment of the public, which "is so directly interested in this industry and in which the industry is so directly interested." The record of successes and failures of all industrial enterprises shows that the mining business offers fewer chances of failure than most commercial undertakings. It requires no more capital, there is less competition, less danger of over production, and always a market for the products. But like any other venture, it must be run on business principles or it will fail. Chance usually plays an important part in the original discovery, but it is the application of business methods that makes the operations successful.

Employer's Liability Laws.

In that masterful address by David Ross of Illinois at the twelfth annual session of this organization on Employer's Liability Laws it was pointed out that under our present system of judicial procedure the burden of proving negligence, upon which the recovery of damages in the case of accident depends, rests upon the plaintiff. The difficulties surrounding the producing of this evidence and the consequent practical impossibility of securing reasonable and just compensation for injury through the strictest employer's liabilities laws, are evident to any one who has come in contact with such proceedings. It appears to me to be within the province of this body to consider this subject and suggest any plan thought desirable to liquidate such claims. This question has been under consideration by the committee on "Coal Tax Insurance Fund" for a year, and to this report your earnest attention is invited. Let us, as a representative body of mining men, not only reach out with our influence to secure such legislation as may lessen the dangers attendant upon mine explosions, but also let us give our influence to the perfecting of plans whereby the laborer and his family may be adequately compensated, in case of injury or death. Truly an injured miner is as deserving of repair as a broken machine.

Mine Inspection Laws.

Uniformity of State laws governing mine inspection will be the subject of a report by one of the standing committees. The laws regulating mining are as many and as varied as there are mining states. Many of the provisions of these laws might be made uniform throughout the country, in spite of varying local conditions. The recommendations of this committee should be carefully con-

sidered, both from the standpoint of the operator and the miner, recognizing at all times the varying conditions to be met in the different districts.

Mine Sanitation.

While we are giving attention to safety in mining we should not forget the question of health arising from the ordinary conditions existing in the mines, both coal and metal. The breathing of dust from drilling machines and from illuminants, and also from deteriorated air, is harmful to those who spend their nights or days beneath the surface.

It is possible that something might be done to better the conditions in the way of sanitation and ventilation, whereby the occupation of mining might be less dangerous to the health of the miner. The use of a different illuminant and the invention of a drill, which will lessen the amount of dust, will go a long way towards rectifying these conditions. These are pertinent subjects for the investigation of the Bureau of Mines.

Mining Education.

This organization should express its continued interest in mining education. The public, let alone those engaged in the business of mining, know too little about even the elements of mining. The establishment and maintenance of mining schools in many of our states has been a struggle against the widespread demand for agricultural and general engineering education, which, of late years, has swept the country. We maintain that mining is as important to the industrial development of the country as agriculture, and there is no reason why our government should not provide as liberally for the one as for the other. It is surprising to learn how little is known by pupils of the public schools in mining districts about the industry which is such a conspicious part of the every day life of the people with whom they live. If the people in the future are to have a better appreciation of the mining industry, there should be some general instruction in the public schools that will direct their attention to that industry.

Your attention is called to the need for more trade schools, wherein artisans may receive instruction in their several trades during short vacation periods. In agriculture, short courses are being provided for the benefit of the farmer who has not had the opportunity to take a regular University course of instruction. Why should there not be established in connection with our Schools of Mines, similar departments, with no requirements for entrance, ex-

cept a desire for knowledge. The Mining Congress should have a standing committee on mining education whose duty it should be to encourage the dissemination of knowledge relative to mining and the allied industries, both as pertains to the public schools and our Schools of Mines. They should do all in their power to assist the schools to secure adequate assistance from the State and Federal authorities.

Mining Stocks.

One who has given any attention to the price of mining stocks as quoted on the various exchanges of the country cannot help but be struck with their constant fluctuations, regardless of the actual changes in the condition of the properties. Stock which is quoted at fifty today may be fifty-five tomorrow, and within a week it may be sixty, with no actual change in the value of the property itself. The price of mining stocks does not depend altogether upon the earning power of the property. The fluctuations are the result of buying and selling, chiefly on margins, which is nothing more nor less than gambling. The business conditions of the country would be vastly improved were it possible to eliminate this speculative element from our industrial activities. There is now a movement on foot, led by the Mining and Metallurgical Society of America, to provide the New York Curb Exchange with authentic reports concerning the actual condition of mining properties listed on the Exchange. This proposition ought to receive the hearty endorsement of the Mining Congress, and any assistance that can be rendered should be offered our sister organization in her efforts to bring this about.

The reports of many of the mining companies are very meager as to earnings and reserves, on account of which stockholders are poorly or not at all acquainted with the condition of the properties in which they have invested their money. What rights have the individual stockholders in a mining company? In what respect do the rights of the minor stockholder vary from the rights of the majority stockholder? I conceive that the least owner of stock is as much entitled to know the standing of the affairs of a company as the greatest. The suppression of information by the officers or directors from the stockholders is dishonorable and dishonest, and should be condemned by this body. I trust that there may be some way suggested by which this body can assist in bringing about a better, safer, sounder condition in the stock markets of the country. I may suggest that one way of doing this is to urge upon the

various companies the importance of issuing printed monthly or bi-monthly reports covering in detail the condition of the property.

Conservation.

During the past few years much has been said and written upon the subject of conservation of our natural resources. It is an old subject, almost as old as civilization. It is a question of extravagance; a question of wasteful and luxurious living. We have been and are today living in a land of plenty, and perhaps too little thought has been given to the careful exploitation of our natural resources. The great corporations of the country are being looked upon by the public as the destructive agents of the present generation. Strange as it may seem to some, in the mining industry, at least, they are the least wasteful of the natural resources, which they are engaged in exploiting; although the individual may, in his personal habits, be criminally extravagant, and the corporation may enter into harmful combinations in restraint of trade. I do not think that the waste in mining can be charged against any class; the poor and the rich, the individual and the corporation, should each be held accountable for his part of the consumption of commodities which are unnecessary to our conception of the highest type of civilization.

There appears to have been some confusion of the question of conservation with that of ownership of the public domain. They undoubtedly have some relation to each other, but in their fundamental natures they are distinct problems. Dr. T. C. Chamberlin of the University of Chicago has recently made the point, and rightly I believe, that "Conservation of our natural resources centers in the scientific and technical," while "the right of ownership and the most desirable distribution of ownership center in the political and sociological." This means that whenever it shall have been determined whether the lands of the public domain shall be owned or leased by the individual, company or corporation, we will still be confronted with the question of conservation.

As far as the conservation of our mineral resources is concerned, it must be conceded that such ownership or distribution of ownership as will result in the least waste, is theoretically the most desirable. Whether the government should use the lands of the public domain as a source of revenue regardless of whether or not the result would be less waste is a question involving other fundamental principles for its settlement.

This organization is vitally interested in conservation, as well as in the question of the disposition of the public domain, in so far as it affects the mining industry. I do not wish it to be understood that this body has less to do with the one than with the other, but this I do wish to emphasize, that in dealing with these questions, by resolution or otherwise, consider them apart from each other as far as possible.

Feeling that this Congress should have a part in shaping any legislation which may be in the interest of conservation or which may deal with the disposition of the public lands, we have invited some of the most thoughtful men of the country to address you on these important subjects. What they say may in some way help to clear our minds as to what policy, while being just to the present generation, will be best for the future welfare of the nation.

Four things appear to be perfectly clear in a consideration of the conservation problem: First, as mining men we cannot afford to have the government enact legislation which will make the occupation of mining more hazardous than it is, either respecting the protection of life, or the investment of money; second, that nothing shall be done that will in any way retard the development of our manufacturing industries that depend upon the products of the mines for their business; third, that everything possible be done to increase the percentage of metals that can be recovered from the ore bodies and from deposits of coal, oil and gas; fourth, to bring about as quickly as possible the use of substitutes for the present sources of power and for the metals which are supposed to be limited in quantity. There should be the fullest development of our mineral resources, under such Federal or State co-operation and regulations as will insure the maximum elimination of waste, it being agreed that our mineral resources should be exploited with intelligence, and in a fair and upright manner.

The attention of the public has been directed especially to the consumption of the mineral fuels, for upon these, perhaps, more than upon anything else, depends the future of our manufacturing, transportation and commerce. It is evident that it requires a constantly increasing quantity of power to maintain manufactures, transportation and commerce; and as long as this power is supplied by coal, oil and gas, legislation which either increases the price of these or removes them from exploitation, can lessen their consumption only by increasing the price of manufactured commodities or by lessening the volume of business.

If it is desired to bring about a decrease in the consumption of the mineral fuels, without lessening the growth of our manufactur-

ing industries or increasing the cost of commodities, one of two things must happen: the efficiency of the mineral fuels must be increased, or substitutes for the mineral fuels must be made available. The waste in mining is said to approximate 50 per cent. This waste, however, cannot be decreased beyond a point where mining becomes profitable. Under the present conditions of the industry there appears to be five ways in which this waste may be lessened, viz., by improved methods of mining, by decreasing the profits, by increasing the price of coal to the consumer, by reducing the price of labor and by securing markets for the poorer grades of coal. In the direction of improved methods of mining and marketing the poorer grades of coal, the Bureau of Mines should be of assistance. In some of the other directions there may be an opportunity to decrease waste, but these are matters which require investigation. There is a fixed amount of energy stored up in the mineral fuels of the country and no device of man will be able to increase this amount. In simple terms then, it is a problem of making this fuel supply last as long as possible or until such time as there may be no need for it. To bring this about something can be done by eliminating waste; something can be done by prohibiting exportation; something can be done by increasing the efficiency of these fuels when burned under boilers; something can be done by discovering new sources of power or by encouraging the use of other powers now known but as yet imperfectly developed.

In searching for ways and means of eliminating waste in mining; in the investigation of ways and means of securing greater efficiency, more heat and power, from the mineral fuels; in the investigation of new sources of heat and energy and in making available other known sources there is a vast and important field for governmental activity.

In this connection I cannot help but refer to the utilization of our water powers. It has been estimated that the water powers of our streams are capable of producing about 30,000,000 horse power; more than is necessary to turn every wheel of industry in the country. Of course some of this power is not at present available and probably will not be for generations to come. But much of it is, and such power should be used, since the quantity available from day to day will not diminish, but that which is not used today is lost forever. It appears to me to be very important that the development of the water powers of the country should be encouraged to such extent that the increasing demand for coal and the other mineral fuels may be lessened. Permitting the water powers to

remain idle is the greatest waste of energy that is being recorded on the continent today.

The man who is engaged in mining is also interested in conservation as it affects our forestry policy. I think that everyone is interested in the conservation of our forests; that is, the protection of our timber supply against the waste and destruction which have marked the advent of the lumberman in his march across the continent. On the other hand, the rulings of the Forestry Bureau have, in some instances, caused unnecessary hardships to the men engaged in mining who have sought to secure timber for their legitimate operations. This may not be due so much to the rulings of the Forestry Bureau as to the placing in the hands of incompetent and irresponsible forest rangers the authority to interpret and enforce these regulations. It appears that there should be some easy and quick method of supplying those engaged in mining with the timber necessary to carry on their operations. The adjustment of these difficulties ought to be brought about with satisfaction to all concerned, through the medium of the Bureau of Mines, which should represent the mining industry in all questions of this character.

As in the case of fuels, there will be no diminution in the amount of timber cut and manufactured into lumber until the public is supplied with materials for building which will be equally as satisfactory and as cheap as lumber, or until the demand for structural materials shall lessen. No one anticipates a time when the demand for building materials will lessen, for that means business stagnation and industrial decadence. However, we all look forward to the time when brick, tile, terra cotta and concrete can be used in building construction at a cost which will not exceed that now paid for lumber. We possess stone and clay in unlimited quantities, and from these can be manufactured all the structural materials that will be needed by our civilization for ages to come. The increased use of these materials will lessen the demand for wood and to that extent conserve this fast diminishing resource. One of the great problems of the present day is to discover methods of manufacturing brick, tile, cement, lime and other structural materials which will so cheapen their cost that the public will prefer them to wood from the standpoint of economy. This may require years of patient research, but to this end the Federal and State authorities should lend their generous support. However, as long as wood can be obtained at less cost than these more durable materials, it will be used by the public and no legislation, Federal or State, can pre-

vent a gradual diminution in our forest reserves outside of the public domain.

Among our metal resources iron and steel, from an industrial standpoint, may be considered the most important. The rapidity with which our known iron ore reserves are being exploited may justify the apprehension that within a century or two this material will be insufficient to supply the demands of industry. There are, however, vast quantities of low-grade iron ore which have been ignored in most estimates of iron ore reserves. It is believed that these ores will become available through improved processes of concentration or smelting by the time the richer deposits fail to supply the demands of the iron and steel industry. Before all of our iron ores are exhausted undoubtedly other materials will have been discovered which will serve as substitutes for iron and steel. We know, for example, that aluminum, which is now produced in limited quantities from the oxide of that metal, can be used in many places as a substitute for steel and iron. There are unlimited quantities of aluminum combined with silica in the form which we know as clay. In quantity it is as nearly inexhaustible as any material we have. I feel confident that some day we will know how to separate, commercially, the aluminum from the silica, thereby providing a metal substitute for iron and steel. The accomplishment of this will add more to our metal resources than can ever be expected from a mere process of saving. When aerial navigation shall have been successfully developed, and there shall have been discovered a process by which aluminum can be obtained from clay on a commercial basis, the problem of our future iron supply will have been practically solved.

In the present stage of our industrial development copper is an extremely important factor. There is every evidence at the present that this material occurs in sufficient abundance to meet all of our industrial demands for many decades to come. The demand for this metal will increase with the development of the wireless telegraph, the wireless telephone and the storage battery cars. With the development of these new methods of transmission I confidently anticipate that the time will come when the demand for copper will decrease rather than increase. Aluminum may also, in time, be substituted for copper for purposes of electrical transmission.

Whether a time will come when substitutes will be found for lead and zinc it is not so easy to predict. These metals are used for a multitude of purposes, many of which could be eliminated without seriously affecting our industrial progress.

The history of mining during the century just passed disclosed the fact that nine new metals have been added to those having an industrial application, and that the technology of more than twenty minerals, and the extension of the application of others, has added great wealth to our country and brought increased prosperity to our people. Then, may we not expect, with adequate provisions for research, that new developments during the present century will more than offset the diminution in the supply of these metals upon which our present industrial activities so largely depend? Just as we search for new gold fields, when others have been exhausted, so, when the supply of one material essential to our industrial activities nears exhaustion, we will reach out into the unknown and discover new sources of power and new materials for construction. I believe that by making adequate provision for research the time when new resources of supply of power will be needed will be greatly postponed; and that when new sources of power are required the intelligence and energies of a nation like ours will discover them and make them answer the demands of commerce.

Although I am opposed to any policy which removes from the public the possibility for developing any of our mineral or allied resources, I would not have you think that I am opposed to conservation, or that I wish in any small degree to retard the movement against the extravagance of our people. I deplore the fact that we place so small a value upon the lives of our citizens working in our mines; I deplore the waste of our mineral resources, and I believe that the Federal and State governments should do everything in their power to protect the lives of their citizens and compel individuals and corporations, while using our resources, not to abuse them.

I am not opposed to the organization of our industrial activities through the formation of well-capitalized corporations. Any criticism that might be offered would be directed against the methods by which the business of some of them is conducted and the utter lack of respect which some of them have for the less powerful competitive organizations and for the public at large. It is generally believed by the public that the waste of our mineral resources is chiefly chargeable to the great corporations. This is, of course, a mistaken idea, since it is an easily demonstrable fact that in mining the greatest percentage of waste is found in the smaller, more poorly equipped mines, and not in those that are well capitalized. The great mining corporations do cleaner work, often make a higher percentage of recovery and use to better advantage the by-products than do the small companies having limited capital.

I believe that our governmental activities should be directed to the control and regulation of our great industrial organizations, while at the same time generous support should be given by the Federal and State governments to technical and scientific investigations. Through the proper encouragement of research I believe that the ingenuity of our people will meet the conservation problem, and that the expansion of commerce and manufacturing will go on, unless luxurious living, too often the accompaniment of great wealth, destroys this nation, as it has the great civilizations of the past.

Ownership of the Public Domain.

The question of the ownership of the public domain, as suggested above, should, as far as possible, be considered apart from that of conservation. In doing this it should be remembered that ownership, which may be otherwise desirable, may be undesirable from the standpoint of conservation and vice versa. In all discussions, which may come before you bearing on this question, keep clearly before you the fact that the question of ownership is political and sociological, while conservation is technical and scientific.

It is not my purpose to discuss this problem, but when you consider it in the sessions of this Congress, or in committee, remember that one of the greatest incentives to exploration, to prospecting, in this country has been the right of possession after discovery. Remember that the possession of water power rights are often an important adjunct to the successful development of mining properties; and that without timber, however important it may be as a means of conserving the rainfall of a region, it would be impossible to operate many of our most important mines. It appears that any proposed legislation bearing upon the disposition of the mineral lands, lands containing water power sites, or forested lands, which might discourage prospecting or make mining more hazardous, should be carefully considered before being approved by this body.

Conclusion.

The American Mining Congress has accomplished something in the years passed, what it may do in the future lies in your hands. You are here to outline a policy for the coming year. It is the duty of the officers and Board of Directors to carry out these plans as nearly as possible, or as may be consistent with the success of those which may be deemed most important. Remember that it requires time and money to accomplish those things which you may outline, and when you vote to have this Congress use its best

efforts to secure some legislation, and do not provide the means to carry on this work, you are expecting an income without an investment. In case you ask this Congress to do anything which requires expenditure of time and money, you will do well to accompany that request with some feasible plan whereby the necessary finances may be provided. It is an easy matter to provide a finance committee, but it is not easy for such committee to secure the funds required to defray the expenses of the association's activities. It may do some good to pass resolutions memorializing Congress to pass such and such bills, but if you earnestly desire the passage of any measure, such resolutions must be followed by an active campaign, which requires both time and money.

This association was organized to teach mining men the value of co-operation; that success cannot be measured by another man's failure; that we must have a decent respect for the lives and health of the men that toil beneath the surface; that there must be a willingness to provide adequately for the men and their families who suffer through accident or death; that there should be laws to restrain and punish the man who is in part responsible for the disrespect in which this profession is held, the fake promoter, who parasites on the public; that all the bureaus of the Federal and State governments, engaged in investigations associated with mining, are helpful to the industry and deserve our generous and undivided support; that much needful Federal and State legislation, helpful to the mining industry and for the protection of our mineral resources, may be enacted through the united efforts of a representative body of mining men.

It is intended that this organization shall foster and promote mining in all its various branches, and to do this its growth must be commensurate with that of the mining industries of the country. It should be represented by men from all the various fields of mining activity and its meetings should be forums for the full and free discussion of all problems that may pertain to the industry. The interests of the mining industry cannot be left in the hands of men who are engaged in agriculture, forestry, manufacturing, transportation or commerce. They must be cared for by organizations of mining men, and I beseech you, in closing, to contribute to this organization the best that you have in order that it may be a power throughout the land.

THE AMERICAN MINING CONGRESS

The American Mining Congress is a voluntary association, supported entirely by the dues and fees of its members. It is striving to bring about:

First—Safety in mining operations.

Second—Intelligent conservation with a view to the highest development of our mineral resources.

Third—The stimulation of investment in practical mining operations by showing that mining is a legitimate business, promising, when intelligently conducted, larger profits with less risk than any other business.

Fourth—Uniformity in state laws governing mining operations carried on under like conditions.

Fifth—Such federal co-operation through research and investigation as will furnish the basis for intelligent state legislation, and will solve those problems of economical production, treatment and transportation which are essential to an increase in mineral production.

To accomplish these purposes it has been active in the campaign which resulted in the establishment of a National Bureau of Mines and in securing appropriations for investigating the causes of mine accidents; in securing the enactment of the so-called "*Pardee Law*" for the protection of mining investors; in educating the public to the needs and advantages of greater uniformity of the laws governing mining operations.

Last year the Mining Congress assisted in organizing the campaign which resulted in placing a duty of one cent per pound on imported zinc ores and in preventing a reduction of duties upon imported lead ores. This result was vital to the mining industry of the West.

The American Mining Congress has been instrumental in bringing about these things through the education, agitation and organization of the forces which have accomplished these results.

The work is but begun. The importance of its completion must appeal to everyone interested in the welfare of the country. We need the support, financial and moral, of a majority of those who are interested in mining to effectually carry on this work.

Every member of the Congress should lend his help to the extent of securing one new member. For convenience, an application blank is printed below, and we respectfully and urgently ask each member to get a new application and send it in to the Secretary's office.

We appeal to you to co-operate with us by becoming a member. Remember, that if you are interested in this work, now is the time to help; do not wait until those who are now carrying the burden have become discouraged.

Sign the appended application blank and mail to

THE AMERICAN MINING CONGRESS,
1510 COURT PLACE, DENVER, COLORADO

AMERICAN MINING CONGRESS

APPLICATION FOR MEMBERSHIP

.....191.....

I hereby make application for membership in the AMERICAN MINING CONGRESS and agree, if accepted, to abide by the By-Laws, Rules and Regulations of said organization and to pay the dues required by same. Herewith find $15.00 membership fee, and $10.00 dues for one year from date. Total, $25.00.

RECOMMENDED BY NAME .....

..... OCCUPATION .....

APPLICATION APPROVED: P. O. ADDRESS .....

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Committee on Membership.